

Page 4, line 25, after "plate", add --27--.

Page 4, line 26, after "lower", add --inner--.

Page 4, line 26, after "plate", add --26--.

Page 4, line 28, after "upper", add --inner--.

Page 4, line 28, after "plate", add --27--.

Page 4, line 32, after "The", rewrite as --Inner

plates 26 and 27 alternate in core 22 so that the --.

Page 5, line 16, after "portions", rewrite "54 and 55" as --44 and 45--.

Page 5, line 19, after "53 and", rewrite "44" as --54--.

Page 5, line 33, after "two end plates", rewrite "84 and 85" as --74 and 75--.

Page 5, line 34, after "compartment", rewrite "88" as --78--.

Page 5, line 35, after "compartment", rewrite "89" as --79--.

Page 5, line 36, after "opening", rewrite "44" as --52--.

IN THE CLAIMS:

1. (amended) A heat exchanger device comprising:
a separately constructed, leak tested heat exchanger core having flat opposed first and second outer core plates, a stack of parallel spaced inner core plates between said first and second outer core plates with spaces between said inner core plates defining alternate flow passages for hot and cold fluids,

[a] an attachable first core retaining plate affixed to one face of said core [after said core has been constructed and tested for leaks, said first core retaining plate] having opposed first and second end

portions extending beyond the ends of said core and having a first pair of flow apertures at preselected precise positions in relation to flow line connectors to which the device is connected,

A4 [a] an attachable second core retaining plate affixed to an opposite face of said core [after said core has been constructed and tested for leaks, said second core retaining plate] having opposed first and second end portions extending beyond the ends of said core with a second pair of apertures at preselected precise positions in relation to flow line connectors to which the device is connected for fluid flow,

attachable first end wall portions connected to said first and second core retaining plates at one end of said core forming first flow compartments to pass fluid toward and away from said core and through one each of said first and second pairs of apertures, and

attachable second end wall portions connected to said top and bottom core retaining plates at an opposite end of said core forming second flow compartments to pass fluid toward and away from said core and through one each of said other of said first and second pairs of apertures.

A4 6. (amended) A device as set forth in claim 1 wherein each of said inner core plates is in the form of a thin flat rectangular heat-conductive sheet having a downwardly inclined end section along about one half the width of said inner core plate and an upwardly inclined end section along about the other one half the width of said inner core plate at one end together with an upwardly inclined end section along about one half

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the width of said inner core plate and a downwardly inclined end section along about one half the width of said plate at the other end of said inner core plate, [each said next lower inner core plate being turned end for end with the one above] said inner core plates having alternating upwardly inclined sections and downwardly inclined sections such that each said downwardly inclined section on one said inner core plate fits against an upwardly inclined section of a next lower inner core plate to form diagonally extending flow passages between said inner core plates.

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12. (amended) A heat exchanger device comprising:
a separately constructed, leak tested heat exchanger core having opposed first and second outer core plates, a stack of parallel spaced inner core plates between said first and second outer core plates with spaces between said inner core plates defining alternate flow passages for hot and cold fluids,

each of said inner core plates being in the form of a thin flat rectangular heat-conductive sheet having a downwardly inclined end section along about one half the width of said inner core plate and an upwardly inclined end section along about the other one half the width of said inner core plate at one end together with an upwardly inclined end section along about one half the width of said inner core plate and a downwardly inclined end section along about one half the width of said inner core plate at the other end of said inner core plate, [each said next lower plate being turned end for end with the one above] said inner core plates having alternating upwardly inclined sections and downwardly inclined sections such that each said

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downwardly inclined section on one said inner core plate fits against an upwardly inclined section of a next lower inner core plate to form diagonally extending flow passages between said inner core plates, each said upwardly and downwardly inclined section having a flat terminal section that butts against a said flat terminal section on another inclined section to form an end closure along about one half the width of said core, said terminal sections being welded, and

a pair of end connectors at each end of said core to pass fluid toward and away from said core in a straight line direction longitudinally of said core.

Please add the following claims:

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1220. A device as set forth in claim 1 wherein said first and second outer core plates and said stack of inner core plates are welded together to form an all welded heat exchanger core, and

said first and second core retaining plates and said first and second end wall portions are welded together with said core to form an all welded heat exchanger.

21. A method of making a heat exchanger comprising the steps of:

assembling a heat exchanger core with a first outer core plate, a second outer core plate and a stack of parallel spaced inner core plates defining passages for hot and cold fluids,

testing said core for leaks,
repairing any leaks found during said testing,
then attaching a first core retaining plate to said first outer core plate and a second core retaining

plate to said second outer core plate, each said core retaining plate having a first end extending beyond a first end of said core and a second end opposite said first end extending beyond a second end of said core, and

assembling a first and second flow compartments between said first end of said core and said first ends of said core retaining plates and third and fourth flow compartments between said second end of said core and said second ends of said core retaining plates.

22. The method set forth in claim 21 wherein the step of assembling a heat exchanger core includes the steps of:

providing a flat first outer core plate,

stacking a plurality of spaced inner core plates on said first core plate with a pair of longitudinal edge spacers disposed between each pair of adjacent inner core plates and extending along the edges of said inner core plates,

stacking a flat second outer core plate on said inner plates opposite said first core plate,

welding said first core plate, said inner plates, said edge spacers and said second core plate together to form an all welded heat exchanger core.

23. A heat exchanger made by a method comprising the steps of:

assembling a heat exchanger core with a first outer core plate, a second outer core plate and a stack of parallel spaced inner core plates defining passages for hot and cold fluids,

testing said core for leaks,

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